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ABSTRACT

While conventional schooling may be successful for many youth, it is problematic for those who are at risk. Conventional schooling assumes the following: (1) all students can derive meaning from a complex and fragmented array of academic courses; (2) all students recognize or can construct a congruence between schooling and their lives; (3) students have similar capacities and motivations for learning; (4) learning is unaffected by the isolation that some students feel in large impersonal institutions; and (5) students can shield their academic performance from the pressures of outside influences or life circumstances. This report examines prototypes of alternative structures that respond in diverse ways to the characteristics and needs of at-risk youth. It attempts to show how these programs can diminish students' sense of isolation, incongruity, and incompetence, and can reengage them in the enterprise of schooling. Programs can affect student performance when teachers assume the extended roles of counselor, confidant, and friend. At-risk youth can be reengaged in school when more attention is paid to their individual needs in and outside of class. Teachers should be encouraged to feel accountable for their students and to participate in critical school policymaking. The report includes 3 references and 3 tables. (AF)

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EFFECTS OF SCHOOL AS A COMMUNITY

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CHAPTER 7

EFFECTS OF SCHOOL AS A COMMUNITY

Seated in front of the small crowd gathered for the school board meeting, Alex taps his fingers on the table and looks at the adults and other students sitting around him. As Sierra Mountain High School's outstanding student during the previous grading period, he has earned the right to give the regular student report about the school. To his right and left are students from Nevada Union and Bear River High Schools - a boy in a polo shirt and trimmed hair, whose clean good looks fit the stereotype of class leader, and a girl dressed in white blouse and skirt whose banter and laughter spill out into the audience. Alex's curly, shoulder-length blonde hair is a throwback to an earlier era, and his turquoise T-shirt seems out of place among the well-attired school board members. His girlfriend is seated in the second row, alone; they exchange glances that seem to reassure Alex about the task at hand.

When called on to review recent events at Sierra Mountain, Alex mentions an all-school meeting held earlier in the week to make plans for the end of the year. Two or three field days have been scheduled to provide students with some incentive to finish their classwork and the opportunity to relax with one another before disbanding for the summer. A group of students also will travel to Yosemite over the weekend for rock-climbing, hiking and camping. Although Alex's voice quavers occasionally, his delivery is clear and strong. Still, there is something unique in his inflection; it lacks the smooth and modulated quality of the voices of his audience and recalls the twang

of Oklahoma or Nebraska, an accent carried to California during the '30s that can still be heard in garages, packing houses and small cafes. Like his clothes and hair, his speech sets Alex apart from the polished urbanity of the people around him. Though white, he is clearly a member of a different class, a class whose values and concerns do not always conform to those who manage the public schools.

According to Sierra Mountain staff, Alex was an impossible student in junior high. Before transferring to Sierra Mountain in the ninth grade, he had earned four F's in a single quarter at Nevada Union. Alex admits hating school in his earlier years because he was always in trouble. He objected to the size of the school and what he perceived to be rigid rules. 'I don't like going to school in a really strict environment because I like being able to cut a little slack. I'm not exactly a goody-goody', he says.

Alex also found that because all of his friends had different lunch periods or classes, he rarely saw anyone he knew. When the one friend who was in some of his classes transferred to Sierra Mountain, Alex decided to make the move, too. At Sierra Mountain, he immediately felt comfortable.

> Everybody seemed so nice and everything, and I liked the fact that they call [teachers] by their first name instead of Mr. Blah-Blah-Blah, and you can't pronounce the last name. At Nevada Union, some of the teachers are really nice, but most of them are snobby.... It seems like they care more

about the rules and regulations than they do the students.

At Sierra Mountain, it's the attention teachers are willing to extend to him that Alex appreciates most. After a year at Sierra Mountain, Alex says, 'I don't really consider them my teachers; I consider them my friends'.

Alex is especially grateful for the encouragement he receives from Mike Menzies, his English teacher. 'He says that I'm one of the best students that they have here. He tells me that on all of my report cards, and that just really encourages me to do good'.

And Alex has begun to do very well. He earned a 4.0 average for the fourth quarter of the 1986-87 school year and had raised his cumulative average to 3.06; he had also made up the credits he'd lost from his initial poor showing at Nevada Union. In addition to the Sierra Mountain teachers' interest in him and their encouragement, Alex says the more relaxed atmosphere at the school has also contributed to his willingness to apply himself and conform to the school's rules. For example, at Nevada Union, he and his friend, Jim were never allowed to work with one another. At Sierra Mountain, this cooperation is encouraged as long as they are quiet and finish assignments.

Alex feels he has learned more in three months at Sierra Mountain than he had in twice that much time at Nevada Union, and he attributes his motivation to the fact that he now enjoys going to school. He has also realized that getting a good education is important so he can eventually 'get a good job and make a living and not have to depend on my parents', a realization fostered by teachers at the school 'trying

to make you understand what life's all about'. He's begun to consider further education and is especially interested in learning more about computers. 'If they're there, you might as well use them. If you enjoy it, you can do a lot of fun things by using your brain and your hands'. He figures that with the right training he might be able to get a job at the Grass Valley Group (a local electronics firm that is a subsidiary of Tectronics).

For a boy who had previously been a consistent behavior problem in school, Alex's reaction to rules is also noteworthy. Though he had been apprehended for smoking marijuana at Nevada Union, at Sierra Mountain he takes pains to obey school rules forbidding drugs and cigarettes.

It should not be inferred from Alex's friendships with staff and willingness to assume responsibility that he has become a perfect student. But while he periodically has run-ins with teachers, he finds this doesn't interfere with the relationships he has established with them.

> Like me and Linda have gotten into it twice, and me and Fred have gotten into it twice. It's like they don't hold grudges. Any other teacher at Nevada Union would just hold a grudge against you. And now it's like me and Linda are real close again. . . . [Teachers at Sierra Mountain] don't let your attitude get in their way.

Neither could it be said that Alex has become a self-motivated learner. Alex admits, 'I'm not really enthused, I'm not, really. I

don't do my schoolwork all the time, but I just do my work and do a good job on it and get it done'. Still, it is this willingness to go along with the school's expectations despite what may be deeper personal preferences that seems most striking about Alex's response to the program at Sierra Mountain.

Alex exemplifies the kind of transformation in student attitudes and behaviors that can result from participation in a special program for potential dropouts. Not all students, of course, make such turnarounds, but many do, and it is useful to summarize briefly the specific effects in evidence after Alex enrolled at Sierra Mountain High School. The most fundamental was a shift in his attitude towards the institution of school itself. What he had previously approached as an aversive experience he now sees as something to be enjoyed. As a result, Alex no longer fights rules and procedures often essential for the smooth operation of the school but instead supports them. Now willing to cooperate, Alex has reversed his previous pattern of disciplinary referrals and course failure and is accumulating the credits required for graduation.

In Alex's case, bonding to teachers and the school they represent has led to improved attendance and academic achievement. It has also led to a reappraisal of his own life options and abilities. The praise he receives from adults he respects has encouraged him to value the importance of education and the doors it can open. Now that he's begun 'to understand what life's all about', he is considering higher education as a means of achieving specific career goals.

Alex's experience at Sierra Mountain raises several themes that will be considered throughout this chapter as we discuss the impact programs for potential dropouts can have on their students. These include the ability of such programs to establish a sense of social bonding to the school, teachers and peers; to support students in their effort to alter previous attendance, behavior, and academic patterns that interfere with school success; to nurture self-esteem and personal control; to improve academic self-concept and to increase aspirations for further schooling; and to extend students' sense of opportunity regarding future occupations. Fundamental to these positive changes, once again, is a commitment on the part of the school to help all students succeed. Such a commitment has led to the cultivation of activities and attitudes aimed at integrating students into the school environment in ways that help them overcome isolation, academic difficulties and the experience of incongruence.

INDICATORS OF PROGRAM EFFECTIVENESS

Before proceeding, it may be useful to review briefly the elements of our argument covered thus far. We first described the way in which effective programs for at-risk youth often tailor their curriculum to the perceived characteristics and needs of a clearly defined student population. We then discussed underlying commonalities at-risk youth share with all students: the need for group membership, the need for positive relationships with adults, the need to acquire skills and knowledge, and the need to develop a sense of competence. This discussion also documented the central role of school membership in the success of at-risk youth. We described aspects of faculty culture that

fostered membership, and we suggested that the maintenance of such a culture often is essential to the effectiveness of school programs. We now investigate the extent to which innovative programs can affect students' sense of social membership and lead to more positive school outcomes.

Assessing Program Effects

Recognizing at the outset the multiple goals and unique structures of the interventions, the complexity of the students' circumstances, and the difficulties inherent in collecting accurate data from and about at-risk youth, we chose to gather data from a variety of sources on a wide range of indicators. Three week-long visits were made to each of the research sites during the 1986-87 school year. During these visits, extensive observations and interviews contributed to our growing understanding of practices that appeared to be successful in reengaging at-risk students in the enterprise of schooling. This qualitative data was supplemented by the administration of pretests and posttests aimed at measuring attitude changes, writing ability and reading level. Attendance and completion rates, changes in student GPA, the incidence of disciplinary referrals, and provision of rehabilitative services also were collected from student files. Summaries of these data are included at the end of this chapter (see Tables 7.1, 7.2 and 7.3).

To assess the effects of fourteen programs on students' sense of social membership, changes in eleven selected personal orientations or attitudes, including social bonding, self-esteem, sociocentric reasoning, locus of control, academic self-concept and perception of

opportunity were monitored through the use of the Wisconsin Youth Survey.[1] Academic performance was measured through pre- and posttest administration of the Degrees of Reading Power (DRP), the scoring of writing samples collected throughout the school year, and information collected from student files on GPA, attendance, and the incidence of disciplinary referrals. In this chapter we present both qualitative and quantitative evidence of the impact these programs can have on the sense of school membership and educational engagement of at-risk youth.

Evaluating Membership in a School Community

Social bonding is measured in terms of the attachment students feel toward school as an institution, their teachers, peers, or accepted societal norms. Proponents of social bonding theory argue that

> . . . conditions favorable to social deviancy are rooted in the absence of or weakness of intimate relations with other persons. A youth who is closely attached to and respecting of others feels approval and esteem emanate from others when his/her behavior is in accord with the other's values and beliefs. If such attachments are absent, approval or esteem are either lacking or meaningless. The youth who does not have the love and respect of those significant others will thus be free to reject the normative pattern they attempt to impose (Wehlage, Stone, and Kliebard, 1980).

Students who feel a sense of social bonding to school or teachers are less likely to reject school and more likely to conform to certain otherwise unappealing rules and procedures associated with schooling. Students who exhibit a high degree of social bonding tend to identify with the institution, actors or norms and see themselves as having a role, a value and a stake in the outcome of the institution's or individual's efforts.

The sense of social bonding exhibited by students in these special programs for potential dropouts is largely the result of their being drawn into a social environment that encourages the formation of positive relations to peers, teachers and the ethos of the school as a whole. Despite the ideology of individualism and self-reliance that characterizes so much of American discourse about education and social mobility, most people need to feel they are a part of a group to achieve any sense of personal identity. If that membership is denied to them - as it had been denied to Alex - people often respond with defiance or disengagement. An important component of this bonding process involves the provision of a more closely knit peer group. Students who had encountered isolation in the larger and more impersonal environment of their former conventional high schools are able to form sustained relationships with friends with whom they are able to share a majority of their class time. This important social element of the school experience often is regarded as problematic by teachers who interpret this aspect of student life as something that interferes with learning. For Alex and Jim, however, being able to

work together at Sierra Mountain laid a foundation for much higher academic achievement as well as more positive feelings about schooling.

David, a student at the School-Within-a-School, spoke of being able to learn more effectively in a class in which he could feel relaxed with his fellow students. 'My reason for that is you feel more comfortable if you make a mistake on something. I mean, all these people know you anyway, and everyone's entitled to mistakes'.

This feeling of being more comfortable with other students and teachers means students begin to allow themselves to take educational risks. Risk taking is essential for academic growth, but it can be severely inhibited by the feeling that even a simple mistake will label one as deviant or unfit. Teachers play a central role in creating an environment in which students are accepted and cared for. Nick, a student at Sierra Mountain, observed that for the first time in his life he looks forward to going to school. Asked why, he was quick to point to his teachers. 'They're just there when you need them. If you were walking to school after missing a bus, you wouldn't see a teacher from NU [Nevada Union] pull over and pick you up. Teachers here would do that'. This sense that teachers are 'there when you need them' leads many students to adopt a different orientation to the values school adults are attempting to convey. The delineation between student culture and teacher culture becomes blurred.

Russ Jones, a staff member at Sierra Mountain, described what can happen when teachers not only treat students as friends but are treated as friends in return. On occasion, he or another teacher will encounter oppositional behavior from a student new to the school; when

this happens, older students will respond, 'Hey, that's not cool. We don't do that. There's no need for that', or 'Mike's [a teacher] a great guy. What are you hassling him for?' Jones says such support makes it clear that

> . . . our relationships with the kids are important to them, too. They value our friendship, and if somebody else is picking on us, then frequently there's another student who will come to our defense. It's really nice instead of there being the 'us and them' it's the 'us and us'.

This willingness to support the school is demonstrated by the respect students in a number of schools exhibit toward the school building and grounds. Alcott Alternative Learning Center, for example, is notably free of graffiti, despite the program's location in an aging former elementary school building. At Sierra Mountain, the maintenance man, Rick, compared the extensive vandalism and graffiti at the local comprehensive high school with the neat, clean appearance of this school primarily for ninth and tenth graders, most of whom had been viewed as behavior problems. At Sierra Mountain, students think of the school as their home, and without adult prodding are careful about disposing of cigarette butts and litter. The fact that they or their peers have had a hand in building fences, planting lawns and caring for the flower and vegetable beds may also contribute to their sense of ownership of the school.

At Croom Vocational High School, students are similarly involved in maintaining the school plant and grounds; there, as well, young people experience the school not as an alien institution but as their own. After the graduation ceremony at Croom, one parent pointed to his weeping son and asked whether the school would be willing to take him back for another year; he didn't want to leave. The importance of the experience of being party to a shared educational venture cannot be overemphasized. Students come to know education not as something that is done to them, but as something they do for themselves and for one another. Such membership counters isolation and incongruence in ways that encourage students to become committed to one another, to their teachers and to their school. It turns an aversive experience into a positive one. As Nick at Sierra Mountain observed, 'It's like coming here makes me want to wake up in the morning'.

Quantitative Indicators of Program Effects on School Membership

From our data in the fourteen schools, estimates of effect size[2] were computed for pre- to posttest changes in student mean scores for social bonding to peers, social bonding to teachers, social bonding to school, social bonding to conventional roles, and for a composite measure. Changes in sociocentric reasoning were also computed. Not all of the programs in our study, however, had identified increasing school membership as a primary goal. In determining whether programs for at-risk youth can effect students' attitudes, it may be inappropriate to include those programs where enhanced school membership was not a dominant focus. Seven of the fourteen (Alcott, Croom, NA-WAY-EE, Loring-Nicollet, Sierra Mountain, School-Within-a-School, Wayne

Enrichment Center) made significant efforts to facilitate school membership.

Of these, six programs showed notable improvements in student attitudes. Four had substantial effects on students' sense of social bonding and sociocentric reasoning. At Wayne Enrichment Center and NA-WAY-EE, students' scores increased on all six measures, with estimated effect sizes ranging from .54 to .82 standard deviations for WEC and .47 to 1.35 standard deviations for NA-WAY-EE. At the School-Within-a-School and Sierra Mountain, student scores increased on five of the six measures. At Sierra Mountain, estimated effect sizes ranged from .04 to .36; at the School-Within-a-School, estimated effect sizes ranged from .19 to .90.

Of the remaining three schools, Alcott and Croom students increased on social bonding to peers, social bonding to teachers, and sociocentric reasoning, while Loring-Nicollet students increased only on social bonding to teachers. While Loring-Nicollet utilizes camping trips and school meetings to facilitate a sense of school membership, the impact of the peculiar nihilism of punk culture makes these results very difficult to interpret.

It is useful to compare these results with three schools (Lincoln, Orr, and a control group made up of randomly selected juniors in an award-winning midwestern high school) that are structured like most conventional American high schools. At Orr, students' scores declined for all six measures, while Lincoln and control students reported only small positive changes in social bonding to teachers.

Even in the remaining four programs, which did not explicitly focus on enhanced school membership, the presence of caring, compassionate teachers resulted in increased social bonding to teachers (estimated effect sizes ranging from .08 to .15 standard deviations) in three of the four programs. In addition, student scores on sociocentric reasoning increased in all four of these programs with estimated effect sizes ranging from .08 to .29 standard deviations. In two of the schools, social bonding to peers increased over .31 standard deviations.

Together, qualitative and quantitative data from the schools involved in our study suggest that programs that respond to students' need for school membership can enhance students' sense of social bonding to peers, teachers, school, conventional roles and sociocentric reasoning.

Evaluating School Performance

Because school performance is difficult to measure directly, a variety of indirect measures of academic engagement were used. These include attendance data, incidence of behavioral disruption, reading and writing ability, and grade point average. Presumably, the school performance of students who attend more regularly and who are not disruptive will improve.

Attendance and behavior

A sample of thirty students was randomly selected from among those students who were enrolled in each program during the year of the study but had not been in the program the previous year. The attendance rates and frequency of disciplinary referrals for these students during

the year prior to program enrollment and the year of program enrollment were collected and compared.

Attendance data were collected for a random sample of students in the fourteen programs. Attendance rates improved markedly in ten of the twelve programs for which the previous year's data were available. Notable positive changes included 62 percent to 87 percent for students at Croom Vocational, 73 percent to 90 percent for School-Within-a-School students, 75 percent to 91 percent for Plymouth Christian Youth Center students, and 81 percent to 95 percent for students at WEC. The attendance of students in two programs (Lincoln and the Minneapolis Urban League Street Academy) declined slightly (96 percent to 94 percent and 75 percent to 74 percent, respectively).

In addition, average daily attendance as reported by the programs compares favorably to overall district attendance rates. Although program average daily attendance exceeds district average daily attendance in only two cases (Lincoln and WEC), the program average daily attendance is often very close to that of the district. In one program (Orr), the attendance rates are identical; in three other programs (Media Academy, School-Within-a-School and Croom) the differential ranges from 2 to 8 percentage points. In the remaining programs, the larger discrepancies can be explained by their open admissions policy, which allows large numbers of students to enroll although many do not attend regularly. While this policy provides students maximum access to schooling, it tends to distort true attendance patterns. In one school (New Futures), the fact that virtually all of the students are pregnant or caring for their own

children accounts for their considerably lower attendance rate compared to the district average daily attendance rate.

We were able to collect comparative data on disciplinary referrals in seven of our fourteen programs. In six of these seven, the total incidence of disciplinary referrals declined. The increase in disciplinary referrals in the seventh program (School-Within-a-School) can be attributed to the implementation of a point system as part of the program intervention and a more restrictive definition of acceptable behavior and/or academic performance.

Academic achievement

Our attempts to document the academic growth of students in these programs were only partially successful. The Degrees of Reading Power test was administered at the beginning and end of the school year as a measure of students' reading ability. In all but five of the fourteen programs, the raw DRP score was lower at posttest than at pretest. Because it seems unlikely that students would read less well at the end of a school year than they did at the end of the previous summer, we are highly suspicious of these results. We suspect that student motivation played a powerful role in determining posttest scores.

A careful examination of the individual test results for students in one program shows how low motivation may contribute to the lower posttest means reported in eight of our schools. The raw DRP score represents the number of correct answers chosen by students out of seventy-seven possible responses. The test is not timed and students are not penalized for guessing. The students' raw score is therefore

highly dependent on the time and attention he or she is willing to devote to the test, as well as on individual ability.

Several students' scores dropped by as much as sixty points, a fact which could only be explained by student motivation. In fact, seven of the eighteen students' scores declined at posttest by thirteen points or more. Although ten students' scores also increased during the period of observation, over a one-year period, the magnitude of the increases (ranging from one to seventeen points) is likely to be considerably smaller than these large decreases (ranging from thirteen to sixty points); consequently declines are likely to outweigh increases and depress the posttest group mean.

It is possible that some posttest increases could be explained by low motivation at pretest. It seems even more likely that posttest decreases could be the result of diminished energy at the end of the school year. Especially given that some students had to take numerous competency exams in addition to our surveys, and others had pressing publication deadlines, it seems reasonable to speculate that their motivation to perform well on a personally meaningless test of reading ability would be low.

Students also were asked to submit writing samples based on a common prompt. These samples were analyzed by an independent panel of experts using primary trait and holistic scoring. (See Appendix B for a more complete description of this process.) The experts did not know that the samples were written by students in programs for at-risk youth. Data were available for twelve of the fourteen programs. Using primary trait scoring, the quality of student writing samples was higher at

posttest than at pretest in six of the twelve programs; quality was lower in five programs and remained the same in another. Using the holistic method, the quality of student writing again improved in six programs, although not in the same six programs.

Comparative data on grade point averages were collected for seven of our fourteen programs. These data could not be collected from six of the remaining seven programs (WEC, Plymouth Christian Youth Center, Loring-Nicollet, MERC, NA-WAY-EE, Minneapolis Urban League Street Academy) because these programs do not assign letter grades. GPA data for the previous year were not collected at the Media Academy. Although changes in GPA from one program to another cannot be taken as a firm indicator of academic growth, significantly higher grades do indicate an increased willingness on the part of students to cooperate with the academic expectations of teachers. In five of the seven programs for which data were available, mean grade point averages increased markedly. Notable changes in mean student GPA include Croom Vocational (0.32 to 2.30), School-Within-a-School (0.86 to 2.99), Alcott (1.22 to 2.48), and Sierra Mountain (1.42 to 2.70). Average GPA declined from 3.12 to 2.71 among students at Lincoln and improved only slightly (1.82 to 1.90) at Orr Academy. The substantial increases in grade point average experienced by students in many programs is encouraging. Mean grade point averages between 2.00 and 3.00 suggest that many students are earning A's and B's in some of their classes.

The support of caring teachers and a renewed sense of connection to the school may well contribute to improvements in attendance, behavior, achievement and GPA. Kelly, a student at Sierra Mountain, found that

the willingness of her teachers to deal with personal problems contributed to her engagement in classes. She described her teachers as 'sisters and brothers', and said that the absence of this closeness had interfered with her learning at a previous high school. 'I needed to get where I could grow close to somebody because I can work much better if I don't feel pressured'. At Sierra Mountain she took pride in the fact that she was now earning A's and B's, a significant improvement over the C's and D's she had become accustomed to earlier on in her school career.

Rickie flourished at the Media Academy, in an environment in which teachers were willing to reach out to him as a person. 'I learned more this year than any other year of school', he said of his first year at the Academy. What had changed more than anything else for Rickie was his attitude about school. He confessed to not liking junior high school very much because there was so much competition among students for favoritism and 'the teachers were not close to the students'. He perceives the Academy as quite different. 'I had never experienced this before where the teachers are close and encourage me. I was just a C+/B- student, but now I am an A/B student'.

Another way to assess student achievement is to look at program completion and/or high school graduation rates, although these data are hard to interpret because of the open enrollment policies of some programs.[3] Students graduating from or completing the program range from 3 percent to 40 percent of the students enrolled in 1986-87. In addition, the data indicate that about one-quarter to more than one-half of the students enrolled in 1986-87 will return to the program for

another year; an additional 6 percent to 40 percent will return to their previous school or enroll in another district program. Together these indicators define a range of successful outcomes for programs dealing with at-risk youth. Considered together, these figures suggest that the programs are successful with slightly less than half to more than three-quarters of the students with whom they work.

Although the number of students earning a high school diploma may sometimes appear low (ranging from 2 percent to 40 percent), it should be remembered that even fewer of these students would have graduated had they not enrolled in a special program. Furthermore, we should remind ourselves that virtually all of the students enroll in these programs with credit deficiencies; many have earned few or even no credits in their one or two years of high school. For many of these students, high school graduation is not a realistic possibility. Even without the acquisition of a high school diploma, students can benefit from what they are able to learn in these programs.

Evaluating Other Program Effects

Finally, several other desirable outcomes are likely to result from both enhanced sense of school membership and academic engagement. In the following sections we look at program effects on self-esteem, locus of control, perception of opportunity, academic self-concept, aspirations for further schooling, and provision of social services.

Building self-esteem

Students' sense of being part of a collective educational enterprise encourages not only better attendance and cooperation, it also leads them to experience an increased sense of worth and competence.

Students at New Futures, for example, often felt isolated and negatively judged in the schools they attended prior to entering this special program for pregnant teens and mothers. At New Futures, staff encourage students to accept their situation and to build on their pregnancy or motherhood. 'They make you feel that you're special', Jill said of her teachers. 'They go the extra mile to make you feel like somebody'. Debra commented, 'I feel proud. I had a baby, and I finished school. I had to work harder. I'm proud of it. It gives you a good feeling'. Not only do the girls at New Futures recognize their own sense of pride and self-confidence, but others see it as well. Carolyn Gaston, the school's principal, reported that students who have participated in the program often are characterized as 'more mature' than other youth their age or other teenage mothers. They also have been described as 'well-grounded'.

Teresa, another New Futures student, spoke of visiting her former school to reenroll. She told one girl she had been at New Futures and had a baby; the girl would not believe her until a third friend came along to verify it. A boy asked nonchalantly whether it had been a boy or girl and its name. Teresa answered calmly and proudly that she had named him Nicholas.

> It made me feel good to tell them without being embarrassed about it. That would really make it hard, if I felt embarrassed about it, but I don't. . . . I think of it as, I know something that they don't. I

have a great joy and it's something they haven't felt.

Gina, a former student from the Wayne Enrichment Center, experienced a similar boost to her self-confidence and sense of adequacy after participating in this alternative program in Indianapolis. She had been at the neighboring high school for less than a semester when she decided to drop out. She said she didn't know anyone, that she had entered the school with friends, but she never saw them. She felt the school was too big and that no one cared about her. She started skipping and was then threatened with expulsion for forging notes from her parents. A short stay at WEC reoriented Gina to the importance of finishing school and helped her to touch a reservoir of inner strength she feels will allow her to overcome the isolation she continues to experience at the larger school. She participated regularly in student group activities run by WEC staff members for former WEC students who had returned to the high school. She liked the fact that through the group she could help other students survive in a big, impersonal, uncaring environment.

Students in a majority of the programs experienced similar changes in their perceptions of their own self-worth. Their responses on the Wisconsin Youth Survey indicated that in ten of thirteen programs, student self-esteem increased. Estimated effect sizes for these ten programs ranged from .03 to .28 standard deviations. The three exceptions include the two programs where the intervention differs little from conventional schooling (Lincoln and Orr) and Croom. While this finding is unsurprising for Lincoln and Orr, interpretation of the

Croom data is more problematic. While the posttest scores of students at Croom Vocational School show declines in all but two of the attitudes and orientations measured (social bonding to teachers and sociocentric reasoning), these data differ substantially from the solicited and unsolicited testimony of Croom students and the observational data we collected.

Another factor related to self-worth is called locus of control. This refers to the student's belief that factors that affect his or her life are within (internal) or beyond (external) personal control. Successful programs for at-risk youth ought to empower students by helping them take control of their lives. A more internal locus of control was reported by students in nine programs, with estimated effect sizes ranging from .03 to .95 standard deviations.

Perceived opportunity and aspirations for further schooling

As students begin to feel more confidence in themselves and more in control of their own lives, many come to view their personal potential and future possibilities differently. Students in seven of thirteen programs believed that a greater number of opportunities were available to them and that they had a greater chance of success in the future. Estimated effect sizes ranged from .03 to .83 standard deviations.

Students in eight of thirteen programs reported higher aspirations for further schooling, with estimated effect sizes ranging from .11 to .94 standard deviations. This may be closely tied to the fact that students in nine of thirteen programs reported increased academic self-concept. Estimated effect sizes ranged from .02 to .87 with seven programs having an effect of .20 standard deviations or more.

One student whose aspirations and academic self-concept increased after enrolling in a special program for at-risk youth is Rickie, a Media Academy student mentioned earlier. Rickie, an Hispanic student, had realized higher education was probably beyond his parents' means and had stopped considering college as an option. Now, after his experiences at the Academy, he is thinking about the possibility of initially enrolling in a community college and seeing what might happen from there. Like Alex, he is attempting to determine how he might best support himself and take control of his own future. Frances, mentioned in Chapter 3, had expected to drop out of high school when she discovered she was pregnant. After being directed to New Futures by her gynecologist, she was able to earn her diploma and win a scholarship that will allow her to attend the local state university to pursue her interest in engineering. Before entering these special programs, students like Rickie, Alex and Frances would have been written off as non-college material. Support from concerned adults helped them to identify different vocational trajectories for themselves.

Curiously, in two programs academic self-concept increased but aspirations for further schooling declined. These declines may simply represent declines in unrealistically high expectations sometimes held by disadvantaged youth (Wehlage & Rutter, 1986; Newmann & Rutter, 1983). At the Media Academy, academic self-concept declined yet aspirations for further schooling increased. This may be related to the fact that this was the most academically rigorous of the fourteen programs; declining academic self-concept may indicate that students

are becoming more aware of how much they don't know and how much they will need to know to succeed after high school. In the two programs most like conventional schools and the control group (Lincoln and Orr), both academic self-concept and aspirations for further schooling declined at posttest.

As we became familiar with many of the youth enrolled in these programs, we began to wonder whether increased perception of opportunity or aspirations for further schooling should be expected or desired in all programs. Where students are unrealistic about their future prospects, programs can perform a valuable service by helping them assess future opportunities in more realistic terms. This suggests that the diminished perception of opportunity reported by students at Plymouth Christian Youth Center, the Media Academy and Croom may not reflect a program shortcoming.

Not all students in programs for at-risk youth possess the skills or proclivities to make advanced academic training a reality. Regardless of this, they are also helped to determine ways by which they might create futures that will be meaningful and satisfactory. Students at Croom, for example, are chosen specifically because of their low academic ability and directed into career paths geared toward local employment. Upon graduating, for example, one former student found a job as a groundskeeper at a large industrial laundry. Because of another employee's illness, he was asked to work inside one day. His performance so impressed his supervisors that they soon found him a permanent inside job. The company eventually offered to pay for additional schooling. Today he is pursuing an associate's degree at a

local technical school and handling some sophisticated engineering tasks such as installing new machinery and programming microprocessors. He credits Croom with much of his success.

The Wayne Enrichment Center offers many of its students the same kinds of enhanced job opportunities. Jim, for example, is a hefty, bearded white male who appears somewhat older than his peers. He is the sole means of support for himself and his parents, both of whom are unable to work. Because of his age and lack of a high school diploma, Jim's job options are limited. He works long hours as a mechanic's assistant to compensate for a low hourly wage. When interviewed on a Wednesday, he said he had worked sixty-seven hours the previous week and had already worked forty-five hours that week. WEC is allowing him to complete his high school education. He says he 'would never have gotten a diploma any other way'. The diploma will open up other options for him, including the military, which he intends to enter in order to continue his mechanical training.

Provision of Social Services

Finally, programs often perform the function of linking students to needed social services. Our data indicate as many as 25 percent of students enrolled in a particular program are receiving drug and/or alcohol rehabilitation services. In addition, programs frequently help students secure counseling, part-time jobs, medical services, child care and even housing or clothing.

DISCUSSION

Our data suggest that most of the fourteen programs we studied have a positive impact on at-risk students' attitudes, academic performance,

in-school behavior and attendance rates. In addition, significant numbers of these students are a.) choosing to remain in school by either staying in the program for another year or returning to their regular school, b.) entering the labor market with enhanced skills, or c.) earning a high school diploma. Finally, many students in programs for at-risk youth benefit from personal counseling or other social services provided by or as a result of program participation.

Six programs in particular showed positive impact on many dimensions of their students' lives. Students at WEC reported positive changes on all eleven attitudes or personal orientations, while students at NA-WAY-EE, Sierra Mountain, and the School-Within-a-School reported positive changes on ten orientations. Students at Alcott and New Futures reported positive changes on eight and nine of the eleven orientations respectively. In addition, each of these programs reported consistent positive changes in academic performance, in-school behavior and attendance.

It is important to note that the six schools which most consistently appear to affect student attitudes and academic performance are markedly different from conventional schools in several important ways. In these programs, teachers have assumed the additional roles of counselor, confidant and friend, and efforts are made to bond the students to the school, to the teaching staff, and to one another. Course content is more closely tied to the needs of the students in these programs, and efforts are made to make the courses more engaging and relevant. Greater emphasis is placed on hands-on and experiential learning and students are given greater responsibility for their own

success. More attention is paid to the individual needs and concerns of students, in and outside of class. Teachers work together to govern the school and make critical decisions about curriculum and school policy. As a result, the programs can adapt to new circumstances quickly. A climate of innovation and experimentation is common, and teachers function as educational entrepreneurs.

In contrast, the least effective programs (Lincoln and Orr), as measured by our eleven attitudes and personal orientations, differed little from conventional schools. At Lincoln, a group of academically promising students are deliberately scheduled into courses for the college-bound, but neither the instruction, the content, nor the expectations for student performance changes. Lincoln students report higher levels of social bonding to teachers at posttest, but lower levels of social bonding to school, self-esteem, academic self-concept, aspirations for further schooling and overall perception of opportunity. In addition, students' attendance rates and grade point averages declined while in the program.

At Orr Community Academy, students take fewer courses and the class period is doubled to provide for more sustained and intensive study of selected subjects, but, for the most part, teaching has not changed. The standard combination of lecture and seatwork predominates, although there are notable exceptions. While reading scores and attendance rates improved significantly, and grade point averages improved slightly at posttest, students reported a diminished sense of social bonding to teachers, schools, peers, and conventional roles, lower

self-esteem, lower self-concept, diminished aspirations for further schooling, and diminished perception of opportunity.

SUMMARY

Taken together, our data suggest that while conventional schooling may be successful with many youth, it is problematic for those who are at-risk. Conventional schooling assumes all students can give meaning to a complex and fragmented array of academic courses, that all students recognize or are able to construct a congruence between schooling and their lives, that students have similar capacities and motivations for learning, that learning is unaffected by the sense of isolation that some students feel in large impersonal institutions, and that students can shield their academic performance from the pressures of outside influences or life circumstances.

The most successful of these fourteen programs can be viewed as prototypes of alternative structures that respond in diverse ways to both the surface characteristics and the underlying needs of at-risk youth. We have attempted to show through qualitative and quantitative data the extent to which these programs are able to diminish students' sense of incongruity, isolation and incompetence, and to reengage these youth in the enterprise of schooling.

Evidence of increases in social bonding to teachers and school, self-esteem, academic self-concept, locus of control and sociocentric reasoning suggest that programs can respond constructively to students' underlying needs. Evidence of improved attendance and behavior, and and increase in the number of credits earned indicate these positive effects are being translated into improved academic performance.

We have seen how programs can affect student performance when teachers assume the extended roles of counselor, confidant and friend, and efforts are made to bond the students to the school, to the teaching staff and to one another. We have seen how at-risk youth can be reengaged in school when more attention is paid to their individual needs and concerns in and outside of class, when greater emphasis is placed on hands-on and experiential learning, and when they are granted greater responsibility for their success. Finally, we have seen how important it is that teachers feel accountable for the individual success of each of their students, and that they be allowed to work together to govern the school and make critical decisions about curriculum and school policy.

In summary, the most successful programs for at-risk youth appear to link school more closely to the experience and values of the students they serve. In addition, by establishing a climate of trust and support, successful programs for at-risk youth help diminish isolation and enhance self-esteem. Together, these factors allow students to focus less on past failure and present circumstances and more on the relationship between success in school and the possibility of a better future.

NOTES

1. The Wisconsin Youth Survey was developed by Gary Wehlage, Calvin Stone, and Robert Rutter at the University of Wisconsin-Madison. Although this instrument no longer mirrors precisely our emergent theoretical perspective (examined in previous chapters), it parallels that perspective closely enough to provide valuable information about the impact these programs have on at-risk youth.

2. Estimated effect size is calculated by subtracting the pretest mean from the posttest mean and dividing the difference by the pretest standard deviation. Estimates of effect size often are used to provide simple but useful estimates of the impact of a given treatment when restricted scale range in combination with small sample size make calculations of statistical significance difficult to interpret. The impact represented by a given effect size can be understood as follows. On average, students will show a net gain of 34 percentile ranks on a particular attitude scale when the program had an estimated effect size of 1.0. For example, a student who scored at the 50th percentile on the pretest would now score at the 84th percentile. Similarly, the same student, having participated in a program with an estimated effect size of .50 for a particular dimension, would score at the 69th percentile of the pre-treatment group.

3. For some programs (especially Plymouth Christian Youth Center, MERC, and Minneapolis Urban League Street Academy), calculating graduation and continuation rates for regular attenders rather than total

enrollment (since many students enroll but do not attend regularly) would yield far higher rates than those that currently appear in the tables.

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Table 7.1 Indicators of Program Effectiveness: School Membership

	n[1]	Social Bonding to Peers			Social Bonding to Teachers			Social Bonding to School			Social Bonding to Conventional Roles			Social Bonding Composite			Sociocentric Reasoning		
		Δ	s.d.	e.s.[2]	Δ	s.d.	e.s.	Δ	s.d.	e.s.	Δ	s.d.	e.s.	Δ	s.d.	e.s.	Δ	s.d.	e.s.
Alcott Alternative Learning Center	56	.02	.45	.04	.12	.39	.31	-.10	.36	-.28	-.04	.40	-.10	-.09	1.24	-.07	.03	.35	.09
Croom Vocational High School	30	.01	.39	.03	.10	.59	.17	-.18	.49	-.37	-.25	.54	-.46	-.31	1.52	-.20	.11	.44	.25
Loring-Nicollet	28	-.06	.48	-.13	.05	.51	.10	-.08	.45	-.18	-.06	.41	-.15	-.18	1.39	-.12	-.08	.44	-.18
Na-Way-Ee, The Center School	14	.25	.29	.86	.25	.29	.86	.28	.26	1.08	.14	.30	.47	.83	.69	1.35	.23	.24	.96
School Within A School	34	.09	.47	.19	.56	.62	.90	.20	.52	.39	-.01	.42	-.02	.85	1.67	.51	.10	.44	.23
Sierra Mountain High School	18	.15	.59	.25	.10	.50	.20	.02	.47	.04	-.06	.55	-.10	.09	1.78	.05	.14	.39	.36
Wayne Enrichment Center	18	.15	.25	.60	.58	.71	.82	.27	.50	.54	.26	.45	.58	1.44	1.85	.78	.36	.58	.62
Media Academy	37	.14	.44	.32	-.05	.44	-.11	-.07	.39	-.18	0	.50	.0	.02	.34	.02	.03	.39	.08
Plymouth Christian Youth Center	27	-.08	.37	-.18	.07	.48	.15	-.20	.38	-.53	-.08	.40	-.20	-.26	1.32	-.20	.03	.32	.09
Minneapolis Education and Recycling Center	15	-.05	.37	-.14	.34	.33	.12	-.10	.31	-.32	-.03	.32	-.09	-.14	.84	-.17	.12	.42	.29
New Futures	27	.13	.42	.31	.03	.37	.08	-.01	.33	.03	-.08	.45	-.18	.06	1.28	.05	.03	.29	.10
Lincoln High School	41	-.03	.47	-.08	.01	.38	.03	-.03	.37	-.08	-.16	.40	-.40	-.20	1.12	-.18	0	.42	.0
Orr Community Academy	270	-.05	.47	-.10	-.04	.48	-.08	-.06	.44	-.14	-.08	.48	-.17	-.25	1.34	-.19	-.02	.40	-.05
CONTROL	83	-.03	.48	-.07	.01	.47	.02	-.05	.51	-.10	-.12	.48	-.25	-.22	1.57	-.14	-.05	.45	-.11

[1] n includes only those students completing both the pre and posttests. Attendance data, disciplinary referrals, and grade point averages were collected from a different sample of approximately 30 students in each program, who were randomly selected from among those enrolled in the program in 1987-88 but who were not enrolled in the program the previous year. NA = not applicable, ND = No data, * = $p < .05$.

[2] Estimated effect size.

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Table 7.2 Indicators of Program Effectiveness: Academic Engagement

	Attendance & Behavior						Academic Achievement							
	Attendance		Disciplinary Referrals				Degrees of Reading Power		Writing - Primary Trait		Writing - Holistic		Grade Point Average	
	Prior	Program	Prior 1-4	Program 1-4	Prior 5+	Program 5+	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Prior	Program
Alcott Alternative Learning Center	ND	91%	4	3	0	0	39.67	48.31*	4.86	4.14	6.00	5.50	1.22	2.48
Crooe Vocational High School	62%	87%	9	11	18	0	35.53	34.44	4.15	4.70	5.45	5.50	.32	2.30
Loring-Nicollet School	80%	85%	ND	ND	ND	ND	72.75	67.88*	5.70	4.70	8.80	8.10	ND	NA
RA-WAY-EE, The Center School	77%	83%	ND	ND	ND	ND	53.64	54.00	4.00	4.11	5.89	6.89	ND	NA
School Within A School at Madison Memorial High School	73%	90%	6	13	0	2	54.43	60.23*	5.01	5.83	7.82	7.53	.86	2.99
Sierra Mountain High School	85%	91%	11	7	4	0	58.00	48.61*	4.75	4.50	6.50	6.25	1.42	2.70
Wayne Enrighment Center	81%	95%	ND	0	5	0	61.36	53.27*	ND	ND	ND	ND	1.53	NA
Media Academy	ND	89%	ND	0	ND	0	54.75	49.94*	4.73	4.91	6.09	6.14	ND	2.50
Plymouth Christian Youth Center	75%	91%	ND	ND	ND	ND	51.05	41.05*	3.91	4.13	5.61	5.17	ND	NA
Minneapolis Education & Recycling Center	75%	87%	ND	ND	ND	ND	48.07	42.93	3.13	3.50	4.88	5.25	ND	NA
New Futures School	74%	79%	10	2	4	0	50.58	53.48	5.24	5.24	7.00	7.08	1.77	2.18
Urban League Street Academy	75%	74%	ND	ND	ND	ND								
Lincoln High School	96%	94%	4	3	0	0	62.90	59.90*	5.41	5.21	6.56	7.08	3.12	2.71
Orr Community Academy	89%	93%	9	9	3	3	39.27	44.47*	3.68	3.07	5.41	4.34	1.82	1.90
CONTROL	ND	ND	ND	ND	ND	ND	62.40	57.43*	ND	ND	ND	ND	ND	ND

Table 7.2 (continued)

Indicators of Program Effectiveness: Academic Engagement

	Program Completion[1]						
	% Graduating or Completing Program	% Continuing for Another Year	% Returning to Previous School or Other Program	% Moved Out of District	% Dropped Out or Uncounted For	% Earning a High School Diploma	% Preparing For or Earning a GED
Alcott Alternative Learning Center	7%	56%	20%	4%	13%	NA	NA
Croom Vocational High School	40%	40%	1%	3%	16%	40%	40%
Loring-Nicollet School	14%	37%	13%	2%	25%[2]	25%	17%
NA-WAY-EE, The Center School	18%	20%	11%	7%	40%[2]	6%	0%
School Within A School At Madison Memorial High School	25%	34%	10%	9%	22%	31%	0%
Sierra Mountain High School	NA[3]	31%	40%	19%	5%	NA	NA
Wayne Enrichment Center	30%	30%	26%	5%	9%	40%	1%
Media Academy	0%	96%	0%	0%	4%	NA	0%
Plymouth Christian Youth Center	6%	22%	6%	0%	38%[2]	17%	5%
Minneapolis Education & Recycling Center	3%	22%	12%	0%	25%[2]	2%	7%
New Futures School	76%[4]	25%	10%	8%	24%	25%	10%
Urban League Street Academy	7%	18%	10%	0%	55%[2]	9%	3%
Lincoln High School	0%	48%	36%	0%	16%	NA	0%
Orr Community Academy	19%	43%	8%	3%	28%	NA	0%
CONTROL	NO	NO	NO	NO	NO	NO	NO

* $p \leq .05$.

[1] These data are for 1986-87.

[2] This information supplied by the Minneapolis Public Schools and does not include all student categories. This is the reason the previous 5 columns do not add up to 100%.

[3] Sierra Mountain serves primarily 9th and 10th graders who complete their education elsewhere. 5% of students in 1985-86 transferred to the county juvenile department school.

[4] One full year of program participation is regarded as completion by New Futures Schools. 21% of former New Futures' students stay at home with their babies or work and are not included in the drop-out figure.

Table 7.3 Indicators of Program Effectiveness: Other Program Effects

	Self Esteem			Locus of Control			Perception of Opportunity			Academic Self-Concept			Aspirations for Further Schooling		
	Δ	s.d.	e.e.s	Δ	s.d.	e.e.s	Δ	s.d.	e.e.s	Δ	s.d.	e.e.s	Δ	s.d.	e.e.s
Alcott Alternative Learning Center	.03	.49	.06	.02	.35	.06	.01	.37	.03	.10	.46	.22	.32	2.14	.15
Crosa Vocational High School	-.20	.47	-.43	0	.65	.0	-.16	.42	-.39	-.08	.46	-.17	-.08	1.52	-.04
Loring-Nicollet	.28	.70	.40	.05	.35	.14	-.11	.41	-.27	.09	.58	.16	.04	1.96	.02
Na-way-fo, The Center School	.25	.38	.69	.35	.37	.95	.25	.30	.83	.32	.34	.94	-.14	1.90	-.07
School Within A School	.23	.56	.41	.14	.36	.38	.27	.38	.71	.54	.59	.92	.47	1.10	.43
Sierra Mountain High School	.22	.58	.38	.07	.38	.18	.07	.34	.21	.22	.49	.45	.28	1.80	.16
Wayne Enrichment Center	.26	.49	.53	.28	.48	.58	.30	.41	.73	.16	.51	.31	1.05	1.21	.87
Media Academy	.05	.55	.09	-.03	.45	-.07	-.05	.37	-.16	-.04	.53	-.08	.29	1.65	.18
Plymouth Christian Youth Center	.09	.50	.18	-.04	.35	-.11	-.12	.27	-.44	.06	.53	.11	.97	1.55	.63
Minneapolis Education and Recycling Center	.05	.21	.24	.16	.29	.48	.09	.28	.32	.11	.36	.31	-.20	1.45	-.14
New Futures	.08	.43	.19	.02	.34	.06	.02	.31	.07	.18	.41	.44	.19	1.68	.11
Lincoln High School	-.16	.49	-.33	-.08	.43	-.19	-.07	.41	-.17	-.06	.45	-.13	-.32	1.66	-.19
Orr Community Academy	-.02	.50	-.04	.04	.42	.10	-.01	.38	-.03	-.04	.53	-.08	-.15	1.93	-.08
CONTROL	.02	.58	-.04	-.03	.43	-.07	-.08	.46	-.18	-.04	.51	-.08	-.09	1.80	-.05